

REMARKS

Applicants have carefully reviewed the Final Office Action dated April 10, 2008. Currently, claims 1-12, 21, 22 and 24-31 are pending in the application, wherein claims 1-12, 21, 22 and 24-31 have been rejected. Claims 1, 3-4, 6-9, 24-26 and 30-31 have been amended with this paper. No new matter has been added. Favorable consideration of the above amendments and following remarks is respectfully requested.

Claims 1, 3-4, 6-9, 24-26 and 30-31 stand objected to for apparent informalities as indicated in the Final Office Action. Appropriate corrections to these claims have been made, as required in the Office Action, in an attempt to overcome this objection. Applicants respectfully request entry of these amendments, asserting amendments complying with requirements as to form may be permitted after final action in accordance with 37 CFR §1.116(b). The amendments to claims 1, 3-4, 6-9, 24-26 and 30-31 do not raise the issue of new matter or present new issues requiring further consideration. In view of these amendments, withdrawal of the objection is respectfully requested.

Claims 1-12, 21-22 and 24-31 stand rejected under 35 U.S.C. §102(e) as being anticipated by Sharrow, U.S. Pat. Pub. No. 2004/0167438. Applicants respectfully traverse this rejection.

As an initial matter, although claims 24-31 were indicated as being rejected in view of the teachings of Sharrow, no discussion was presented in the Office Action indicating what portions of Sharrow were relied on as teaching the limitations of claims 24-31. Applicants respectfully note that the Examiner has an obligation to identify the particular part of a reference, as nearly as practicable, relied on in rejecting a claim. See 37 CFR §1.104(c)(2). In the event the rejection of claims 24-31 is maintained, Applicants respectfully request the Examiner provide clear explanations for maintaining the rejection of these claims, in order to afford the Applicants an opportunity to respond. See M.P.E.P. §707.07(f).

A rejection based on anticipation requires the identical invention as claimed to be shown in a single prior art reference. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. §2131, citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete

detail as is contained in the ...claim.” M.P.E.P. §2131, citing *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). In formulating the rejection of the pending claims, specific reference was made to Paragraphs 36-38 of Sharrow. Applicants respectfully assert that these paragraphs of Sharrow do not expressly or inherently disclose each and every limitation recited in the pending claims necessary in upholding a rejection of anticipation.

Claim 1 includes winding the coil under tension over the polymer jacket and heating the jacket so that the coil moves inward into the polymer jacket, relieving the coil tension and wicking a portion of the polymer jacket between adjacent windings of the coil. As described in the specification, the coil may be initially wound over the polymer jacket under tension. The polymer jacket, located radially inward of the coil, restrains the coil from assuming a smaller diameter, thus retaining tension within the coil. The tension remaining within the coil after the coil has been wound over the polymer jacket allows the coil to shrink in diameter (revert toward the diameter the coil would have if it were not in tension) when a force opposing the tension force (e.g., the outward force exerted on the coil by the polymer jacket) is removed or reduced. When the polymer jacket is heated, the radially outward force exerted on the coil by the polymer jacket is reduced, allowing the coil to move inward into the polymer jacket until a new equilibrium is established. As the coil moves inward into the polymer jacket, the coil assumes a smaller diameter, relieving tension within the coil.

Sharrow at least fails to teach these elements of the method of claim 1. For instance, at no point throughout the indicated paragraphs does Sharrow indicate that the coil moves inward into the polymer jacket upon heating of the polymer jacket as recited in claim 1, relieving tension within the coil.

Sharrow discloses several alternative ways in which the reinforcing member (i.e., braid or coil) is fully or partially embedded within the jacket 20. These various ways are discussed throughout paragraph 37 of Sharrow. Throughout this paragraph, the reinforcing member is taught as being “disposed over” or “placed over” the jacket 20. With the reinforcing member “disposed over” or “placed over” the jacket 20, additional jacket material is placed over the reinforcing member such that the reinforcing member is located between two layers or portions of the jacket.

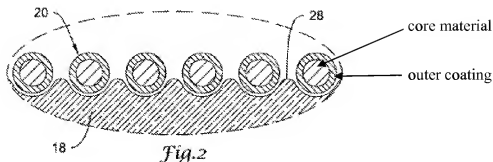
Even if the Examiner maintains that Sharrow teaches winding a coil under tension over a polymer jacket, which the Applicants do not concede, there appears to be no discussion that the tension within the coil is ever relieved, as currently claimed. Namely, at no point does Sharrow teach that upon heating of the jacket, the coil moves inward into the polymer jacket, relieving the tension within the coil.

For at least these reasons, Sharrow does not anticipate claim 1. Claims 2 and 6, which depend from claim 1 and include additional limitations, are also believed allowable over the teachings of Sharrow for at least the reasons stated above. Withdrawal of the rejection is respectfully requested.

Similar to the discussion above regarding claim 1, Sharrow fails to disclose the steps of claim 3 of winding the coil under tension over the polymer jacket and heating the polymer jacket so that tension within the coil is relieved and the outer surface of the jacket wicks between adjacent windings of the coil. As mentioned above, Sharrow teaches that the reinforcing member is “disposed over” or “placed over” the jacket 20. Even if the Examiner maintains that Sharrow teaches winding a coil under tension over a polymer jacket, which the Applicants do not concede, there appears to be no discussion that the tension within the coil is ever relieved, as currently claimed.

For at least these reasons, Sharrow does not anticipate claim 3. Withdrawal of the rejection is respectfully requested.

Claim 4 recites that the coil includes a central core material and an outer coating surrounding the central core material. At no point does Sharrow disclose a coil including a central core material and an outer coating surrounding the central core material. Consistent with the usage of the word “surrounding” in the present application, Merriam Webster’s Collegiate Dictionary defines “surround” as -to enclose on all sides; envelop; encircle-. Thus, the outer coating as claimed surrounds the central core material of the coil. Figure 2 of the present application, which is reproduced below, illustrates one possible arrangement in which an outer coating surrounds a central core material of a coil.



In attempting to identify the portion of Sharrow relied on as teaching this limitation of claim 4, express reference was made to paragraphs 35, 36 and 39 of Sharrow. Upon carefully reviewing the contents of these paragraphs, Applicants assert these paragraphs fail to teach an outer coating surrounding a central core material of a coil. Additionally, the Examiner appears to look to the disclosure of Zhou, which was incorporated by reference in Sharrow, to teach this limitation of claim 4. Namely, express reference to paragraphs 29-31, 38 and 56 of Zhou was made in supporting the rejection. Upon carefully reviewing the contents of these paragraphs, Applicants assert these paragraphs additionally fail to teach this limitation of claim 4. **In the event the Examiner upholds this rejection, Applicants respectfully request the Examiner quote the exact words, phrases, or sentences of the identified paragraphs of Sharrow and Zhou which are relied on in meeting this limitation of claim 4. See M.P.E.P. §707.07(f).**

Furthermore, similar to the discussion above regarding claim 1, Sharrow fails to disclose the steps of claim 4 of winding the coil under tension over the polymer jacket and heating the polymer jacket so that the tension within the coil is relieved and the outer surface of the jacket wicks between adjacent windings of the coil. As mentioned above, Sharrow teaches that the reinforcing member is “disposed over” or “placed over” the jacket 20. Even if the Examiner maintains that Sharrow teaches winding a coil under tension over a polymer jacket, which the Applicants do not concede, there appears to be no discussion that the tension within the coil is ever relieved, as currently claimed.

For at least these reasons, Sharrow does not anticipate claim 4. Claim 5, which depends from claim 4 and includes additional limitations, is also believed allowable over the teachings of Sharrow for at least the reasons stated above. Withdrawal of the rejection is respectfully requested.

Claim 7 recites the step of embedding the coil into the outer surface of the jacket in a manner that alters the shape of the outer surface of the jacket so that the outer surface of the jacket wicks outward between adjacent windings of the coil. As indicated in the present application, “embedding” is intended to mean that the “coil 20 is implanted or entrenched within jacket 18 and is not simply disposed on the top of jacket 18, completely submerged within jacket 18, or disposed between jacket 18 and another layer of material.” Specification, at page 2, lines 16-21. Thus, Applicants have expressly indicated in the Specification what is intended by embedding the coil into the outer surface of the jacket. “Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim.” M.P.E.P. §2111.01 IV, citing *Toro Co. v. White Consolidated Industries Inc.*, 199 F.3d 1295, 53 USPQ2d 1065 (Fed. Cir. 1999).

As mentioned above, Sharrow discloses several alternative ways in which the reinforcing member (i.e., braid or coil) is fully or partially positioned within the jacket 20. These various ways are discussed throughout paragraph 37 of Sharrow, reproduced below.

Reinforcing member or braid 12 may be disposed over at least a portion of jacket 20. In at least some embodiments, braid 12 may be partially or fully embedded within jacket 20. Embedding may be established in a number of ways. For example, braid 12 may be placed over a partially molten jacket 20 and then placing additional partially molten jacket 20 over braid 12. Alternatively, braid 12 can be disposed over jacket 20, additional jacket layer or layers can be placed over braid 12, and then the various layers of jacket 20 can be melted together. In still other alternatives, jacket 20 may comprise a plurality of heat shrinkable materials such that braid 12 may be disposed between two or more layers of jacket 20 and then the jacket layers 20 can be shrunk and melted together. In still other alternative embodiments, jacket 20 may include a low melting temperature polymer that flows when exposed to heat. Braid 12 can be disposed over jacket 20 and a heat shrink outer jacket or coating can be disposed over braid 12 and the various structures can be thermally treated to embed braid in jacket 20. The outer coating can be left on the outer surface or it may be subsequently removed. It can be appreciated that a number of other manufacturing methods may be used to embed braid 12 within jacket 20 (and/or layers of jacket 20) without departing from the spirit of the invention.

Throughout this paragraph, the reinforcing member is taught as being “disposed over” or “placed over” the jacket 20 and additional jacket material is placed over the reinforcing member such that the reinforcing member is located between two layers or portions of the jacket. These arrangements clearly fall outside of the Applicants’ definition of “embedding” provided in the

Specification which distinguishes from embodiments in which the coil is simply “disposed between jacket 18 and another layer of material.” Specification, at page 2, lines 20-21.

At no point does Sharrow suggest that the coil is embedded in the outer surface of the jacket in a manner that alters the shape of the outer surface of the jacket so that the outer surface of the jacket wicks outward between adjacent windings of the coil as provided for in claim 7.

For at least these reasons, Sharrow does not anticipate claim 7. Claims 10-12, which depend from claim 7 and include additional limitations, are also believed allowable over the teachings of Sharrow for at least the reasons stated above. Withdrawal of the rejection is respectfully requested.

Claim 8 recites the step of embedding the coil into the outer surface of the jacket in a manner that alters the shape of the outer surface of the jacket so that the outer surface of the jacket wicks outward between adjacent windings of the coil. As indicated above, Applicants have provided an express definition in the Specification for the term embedding, which is distinguishable from embodiments in which the coil is simply disposed between a polymer jacket and another layer of material as described in Sharrow. See Specification, at page 2, lines 16-21.

At no point does Sharrow suggest that the coil is embedded in the outer surface of the jacket in a manner that alters the shape of the outer surface of the jacket so that the outer surface of the jacket wicks outward between adjacent windings of the coil as provided in claim 8.

For at least these reasons, Sharrow does not anticipate claim 8. Withdrawal of the rejection is respectfully requested.

Claim 9 recites the step of embedding the coil into the outer surface of the jacket in a manner that alters the shape of the outer surface of the jacket so that the outer surface of the jacket wicks outward between adjacent windings of the coil. As indicated above, Applicants have provided an express definition in the Specification for the term embedding, which is distinguishable from embodiments in which the coil is simply disposed between a polymer jacket and another layer of material as described in Sharrow. See Specification, at page 2, lines 16-21.

At no point does Sharrow suggest that the coil is embedded in the outer surface of the jacket in a manner that alters the shape of the outer surface of the jacket so that the outer surface of the jacket wicks outward between adjacent windings of the coil.

Furthermore, similar to the discussion above regarding claim 1, Sharrow fails to disclose embedding the coil within the jacket includes relieving the tension within the coil. As mentioned above, Sharrow teaches that the reinforcing member is “disposed over” or “placed over” the jacket 20. Even if the Examiner maintains that Sharrow teaches winding a coil under tension over a polymer jacket, which the Applicants do not concede, there appears to be no discussion that the tension within the coil is ever relieved, as currently claimed.

For at least these reasons, Sharrow does not anticipate claim 9. Withdrawal of the rejection is respectfully requested.

Similar to the discussion above, Sharrow fails to disclose the steps of claim 21 of disposing a coil under tension about the outer surface of the jacket and heating the thermoplastic jacket so that tension of the coil is relieved and the coil embeds within the jacket. As mentioned above, Sharrow teaches that the reinforcing member is “disposed over” or “placed over” the jacket 20. Even if the Examiner maintains that Sharrow teaches winding a coil under tension over a polymer jacket, which the Applicants do not concede, there appears to be no discussion that the tension within the coil is ever relieved, as currently claimed. Furthermore, as indicated above, Applicants have provided an express definition in the Specification for the term embedded, which is distinguishable from embodiments in which the coil is simply disposed between a polymer jacket and another layer of material as described in Sharrow. See Specification, at page 2, lines 16-21.

For at least these reasons, Sharrow does not anticipate claim 21. Withdrawal of the rejection is respectfully requested.

Furthermore, similar to the discussion above, Sharrow fails to disclose the steps of claim 22 of disposing a coil under tension about the proximal section of the jacket and heating the thermoplastic jacket so that tension of the coil is relieved and the coil embeds within the jacket. As mentioned above, Sharrow teaches that the reinforcing member is “disposed over” or “placed over” the jacket 20. Even if the Examiner maintains that Sharrow teaches winding a coil under tension over a polymer jacket, which the Applicants do not concede, there appears to be no discussion that the tension within the coil is ever relieved, as currently claimed. Furthermore, as indicated above, Applicants have provided an express definition in the Specification for the term embedded, which is distinguishable from embodiments in which the coil is simply disposed

between a polymer jacket and another layer of material as described in Sharrow. See Specification, at page 2, lines 16-21.

For at least these reasons, Sharrow does not anticipate claim 22. Withdrawal of the rejection is respectfully requested.

Reexamination and reconsideration are requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is also respectfully requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

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By their Attorney,

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